

PHENIX WEEKLY PLANNING



11/8/12
Don Lynch

This Week

- Complete Repairs & Upgrades for MuTr Stations 2&3 N
- complete VTX/FVTX Repairs, Survey at Chemistry
- Continue VTX Cooling System Upgrade
- Continue RPC3 Gas Recirculation Upgrade
- Complete Thermocouples on RPC1 North Install
- Complete RPC1 North Cooling Upgrade
- Install MMS East Vertical Lampshade (Dave P.) ? - Done
- Reinstall North beampipe support - Done
- Survey Beampipe at North support - Done
- Remove station 1 scaffolding
- Continue working on RPC3 shielding
- sPHENIX design support
- MPC-Ex design support
- Window Washer safety upgrades
- MuID Collar IR staging area support

Next Week

- Move CM to run position
- Install VTX/FVTX
- Continue VTX Cooling System Upgrade
- Continue RPC3 Gas Recirculation Upgrade
- RPC1 South Cooling Upgrade
- Continue working on RPC3 shielding
- Window Washer safety upgrades
- Complete MuID Collar IR staging area support
- Substation breaker upgrade/test (CAD) (Dec 1)
- sPHENIX design support
- MPC-Ex design support
- Install MTP patch bay and jumpers for FVTX in counting house. - November
- Add several backup MTP fibers from CH to IR - November

Substation breaker upgrade/test (CAD)

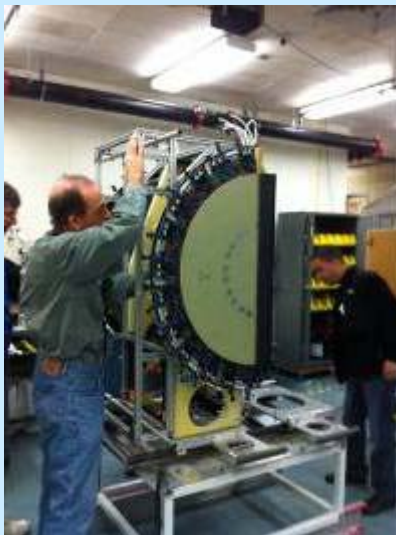


Upgrade & Test to be performed ~Dec 1. Drawings/wiring schemes by P. Giannotti have been reviewed and approved by CAD. Paul will be present and work with line crew to install and with CAD to test (blue sheet test)



TECHNICAL SUPPORT ZONE

- Last month: Install Cooling manifolds and TC's, Test B1 west, Mate B0 & B1, Mate West Pixel barrels with strips, Attach and Test bigwheels (finishing this week)
- last week into this week: Install FVTX cages, Test FVTX west, prep for survey
- This week: Survey get ready to move to 1008
- Week of Nov 12: Install at 1008.
- Week of Nov 19: Survey and services



VTX/FVTX



Installation to begin next week

Clamp-on Terminator Installation on North & South Station-3

- South Done, North To be completed this week

TECHNICAL SUPPORT ZONE



Completed



MPC Repairs -



North MPC

South MPC



Completed

RPC Station 1 North and South Cooling Upgrade & Monitoring



South

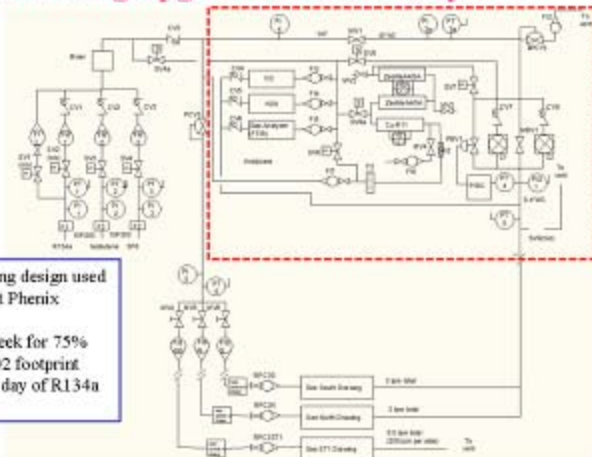
South thermocouples installed, cabled and calibrated; cooling upgrade to be completed after North Upgrade and monitoring are completed and CM is moved north to run position



North

North thermocouples installed and cabled; calibration and cooling upgrade to be completed this week

Run 12 Shutdown Work Overview Gas/Cooling Systems Recirculating Upgrade to RPC Gas System



- Based on working design used for many years at Phenix
- Save money
 - \$3k per week for 75%
- Reduces lab CO2 footprint
 - 60 lbs per day of R134a

June 20, 2012

15

VTX/FVTX Cooling Upgrade

- Piping ~ done
- New filtration system in place, mostly connected
- Big Wheel manifolds assembled ready for installation at 1008
- Chiller 1 repair done

RPC Recirculation Upgrade

Recirculation Piping installation - In Progress

GMH rack moving along
Purification system controls assembly,
installation and testing - D. Northacker to finish
in December

PC upgrade - November

Analyzer procurement in process (~4 months)



RPC Background Attenuation Project

TECHNICAL SUPPORT 2012



Looking towards RPC3 North
 ← East West →



Looking towards RPC3 South
 ← West East →

Large shielding modifications at Q2 upstream
 north and south to be planned and installed by
 CA-D (Dave Phillips) by 12/14/2012

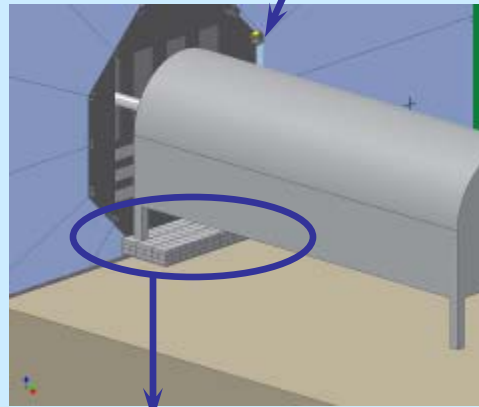
RPC Background Attenuation Project

TECHNICAL SU

Under DX at RPC3 North
 ← East West →



Under DX at RPC3 South
 ← West East →



144 Steel bricks, 2x4x8,
 stacked in 3 high, 16 wide, 3
 rows, respectively by 11/21



MuID Collar IR Holding Area Support

Structural support improvements designed

Installation in progress



Window Washer Remote Pin Removal and Winch/spooler safety upgrades

Space available:
16.5" x 27" x 28" h





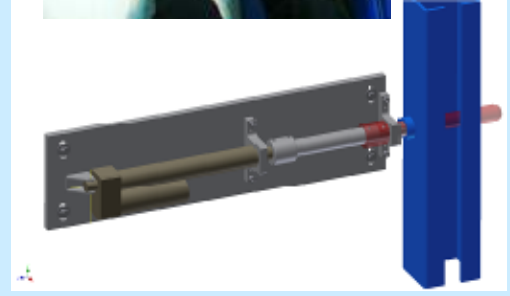
AutoAdvance LINE SPOOLER
ALL FRAME SIZES

Create perfect line spooling for any winch or hoist.

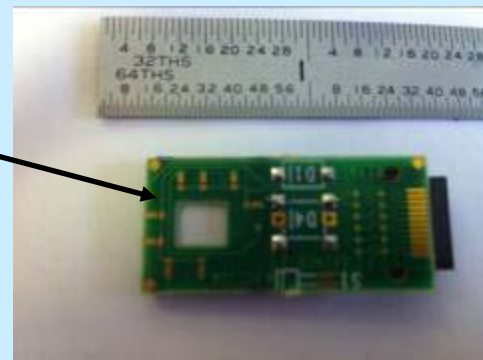
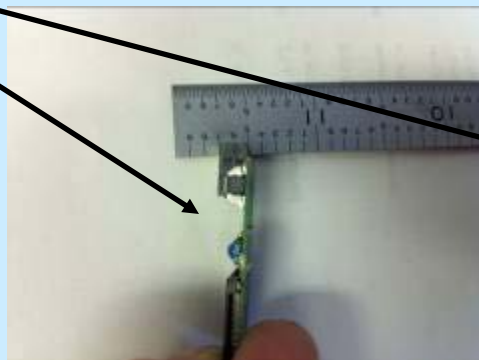
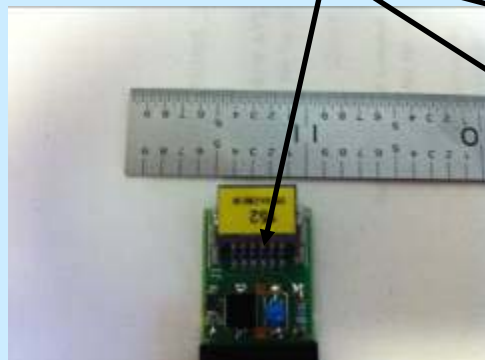


Auto Advance Line Spoolers eliminate the need for a fixed sheave precisely located in relationship to the drum to achieve proper line spooling.

Auto Advance Line Spoolers work with any size of line and even with differing sizes of line on the same drum to create optimal line spooling. Large diameter sheaves in the Auto Advance Line Spooler ensure the line is not damaged by small radius bends.



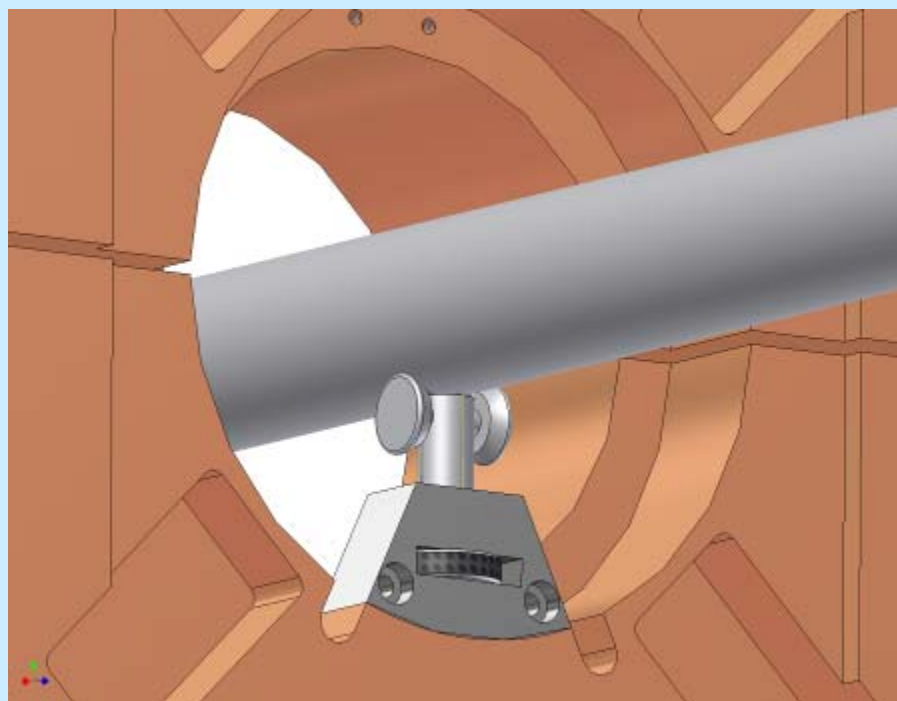
Rad monitor sensors



VTX/FVTX Radiation Monitoring Test



Mount 6 Rad monitor sensors in the south nosecone cavity, 2 sets of 3 at different z, at 3.5, 8.5 and 16.2 mm radially from nominal beam axis



Other Subsystem Work and Future Upgrades related Work

New Electrical Work for 2012 Shutdown, to be accomplished as time is available

1. Remote breaker switch - parts ready install **partially completed. Repaired broken breaker installation and blue sheet test of breaker to be re-scheduled**

PHENIX Electronics Upgrades

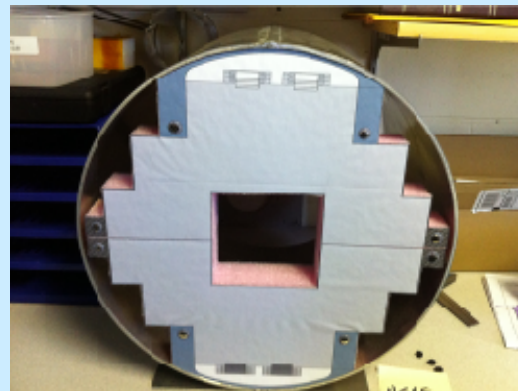
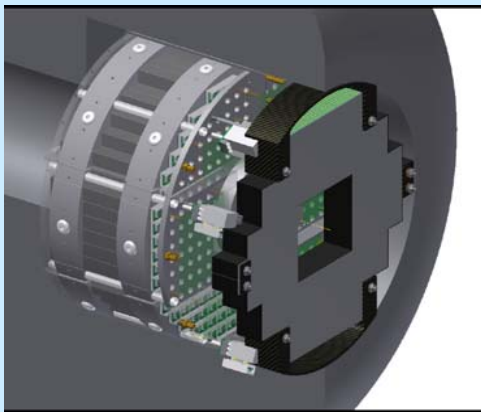
1. Install second MODBUS server in counting house. - TBD
2. Install MTP patch bay and jumpers for FVTX in counting house. - November
3. Add several backup MTP fibers from CH to IR - November

Additional Work for 2012, not yet scheduled, to be fit in as available

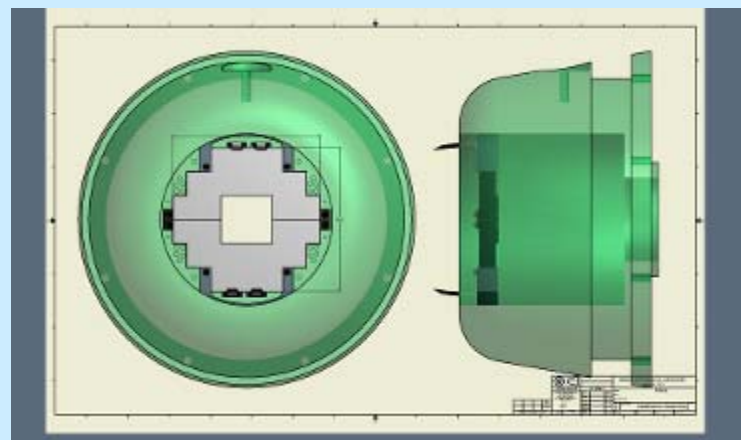
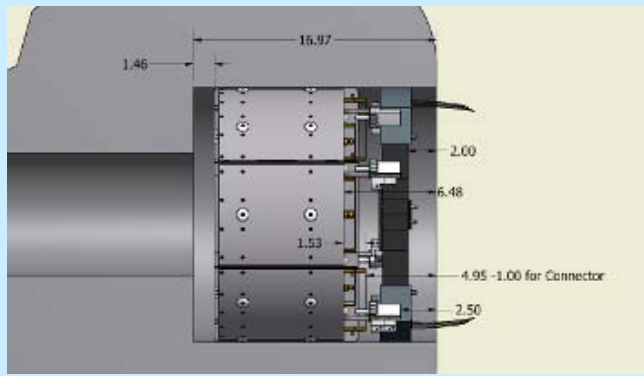
1. Replaced aging magnet hoses (CM only) - In Progress
2. identify obsolete services passing through sill and remove them. - As time is available
3. Cover for services coming from IR through sill. - After Shutdown
4. Plan for stripping out TEC electronics and services to free up TEC racks. - As time is available

Remaining Work Permits/Procedures for Shutdown 2012

- RPC Background Attenuation Shielding @ DX Magnets - In Progress
- Window Washer autospool and remote pin removal upgrade
- MuID Collar IR Holding Area Support
- End of Shutdown (PHENIX)



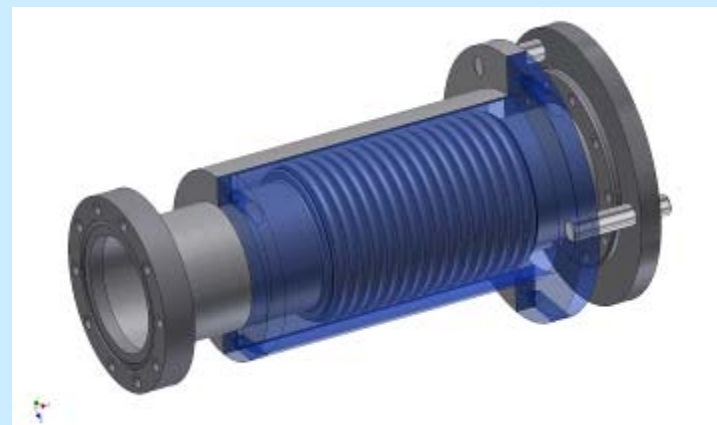
Foam Mockup



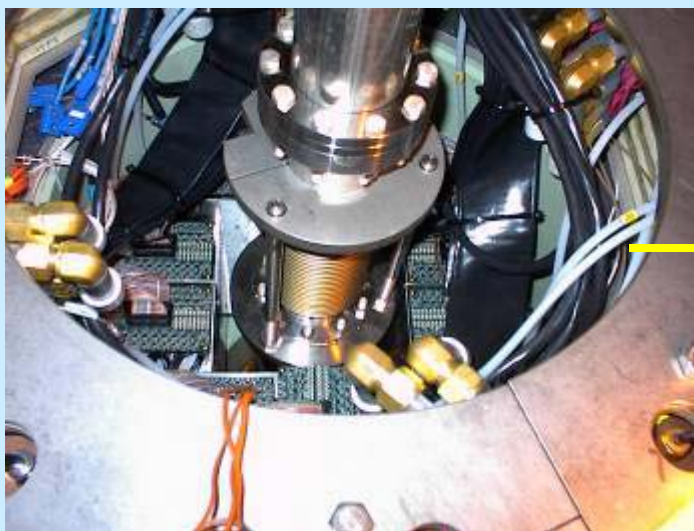
MPC-Ex approved, design work in progress,
new cables for MPC South installed



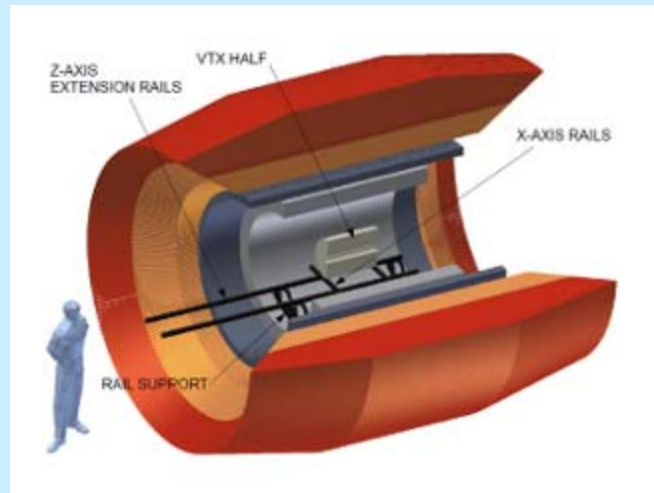
Existing vacuum bellows anti-squirm
In MPC S Cavity



Proposed vacuum bellows anti-squirm
In MPC S Cavity to accommodate MPC-Ex



MPCS Flat cables replaced with round cables.

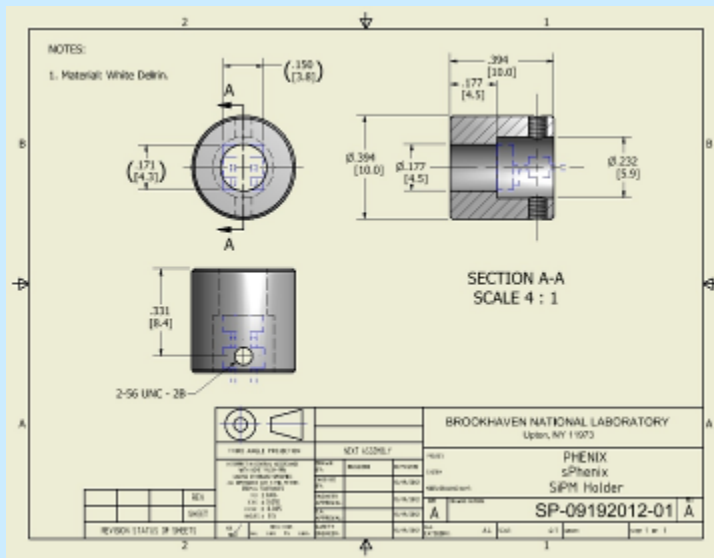
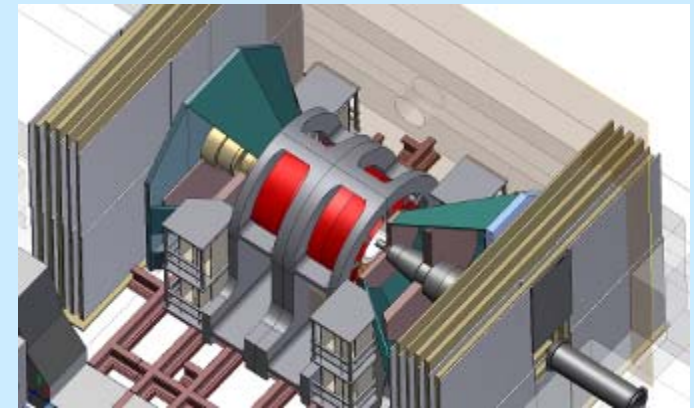


sPHENIX Proposed Upgrade

Work continues evaluating engineering tradeoffs for EMCal and HCal design, materials, etc.

BNL Review last week

Prototype HCal and EMCal in progress



Silicon Photo
Multiplier Holder

TECHNICAL SUPPORT 2012

Re-cable, re-hose and test	Done
Re-capacitation and air manifold upgrades	
Re-install MMS lampshade	Done
Capacitor Clamps and air manifolds (North)	11/7/2012
Remove station 2/3 north scaffolding	11/16/2012
Remove Station 1 South Scaffolding	Done
Move CM South, Open station 1 North	Done
DC West maintenance (replace window)	Done
Reinstall MPC North	Done
Repair upgrade, reassemble VTX/FVTX	Done
Test, survey (at Chemistry and IR) and re-install VTX/FVTX	10/26-11/12/2012
MuID IR storage support	11/9/2012
Remove station 1 North Scaffolding	11/9/12
Veterans Day Holiday	11/12/2012
Move CM To run position, Open station 1 South	11/13/12
RPC 1 South cooling upgrade	11/16/12
VTX Cooling System Upgrades	In Progress 11/16
Re-install MMN access panel on lampshade	11/21/2012
Install MTP patch bay and jumpers for FVTX in counting house.	11/21/2012
Add several backup MTP fibers from CH to IR - November	11/21/2012

TECHNICAL SUPPORT ZONE

Prep for EC roll in	11/12-11/21/2012
Thanksgiving Holidays	11/22-23/2012
Roll in EC	11/26-11/30/2012
RPC Recirculation Upgrade	12/1/2012
Substation breaker upgrade/test (CAD)	12/1/12
RPC Shielding under DX magnets	12/1/2012
Prep IR for run	12/3-12/7/2012
Install VTX/FVTX Rad Monitors	12/14/2012
RPC tunnel Shielding (Dave Phillips)	12/14/2012
Window Washer pin & spool upgrades	12/14/2012
Christmas Holidays	12/21-1/1/2013
Pre-run commissioning and prep for run 13	11/1-1/11/2012
Pink/Blue/White sheets	12/7-1/11/2012
Start run 13	2/11/2013

From Ray Karol:

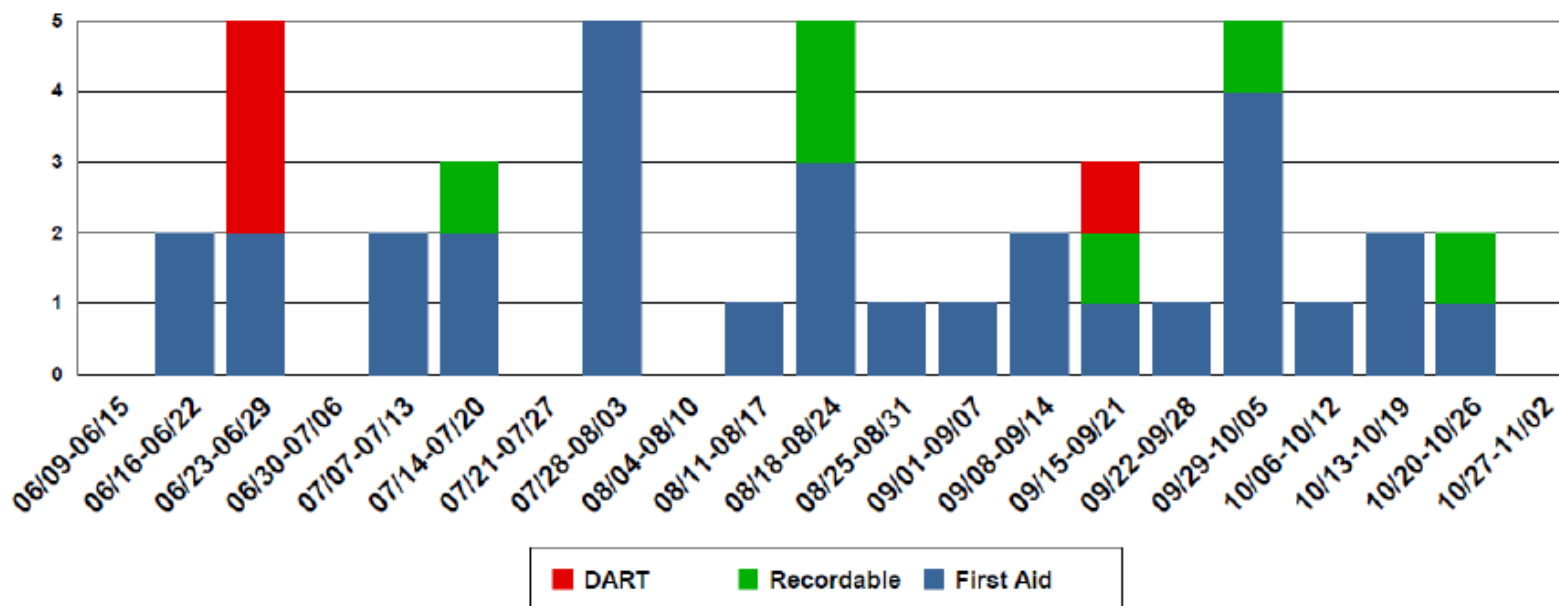
The RHIC tunnel will be posted ODH-1 at the start of the FY13 run. It may convert to ODH-0 if the new modification for sensing and initiating actions following a major helium release in the tunnel is completed

Your ODH 1 training and physicals must be up to date. You can wait until early January to renew, but you must have the training before the start of the run if you plan to or may have to do any work in the tunnels.

Reminder: Benefits open enrollment time is now to Nov. 16. Update your benefits options on line at BNL Benefits web site.



Injuries Per Week As of 11/2/2012



Injury Status:

FY13 YTD: DART – 0, TRC – 2, First Aid – 8

FY12: DART – 17, TRC – 35, First Aid – 70

FY11: DART – 30, TRC – 44, First Aid – 45

FY12 Injury Listing: <https://intranet.bnl.gov/esh/shsd/seg/OccInj/BNLIInjuries.aspx>

Recent Injuries

10/26/12	Recordable	An employee was placing equipment into a pit, when the cover slipped and closed on his fingers. After transportation to the ER, sutures were applied, making this recordable. (Event Link)
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Recent Events		
10/31/12	SC-BNL	On 10/29/12, an Ultra Low (-80 degree) freezer located in Bldg 490 Block 12 was plugged into an outlet via extension cord in Bldg 490 Block 9, to utilize the Bldg 490 emergency generator. This was done in preparation of Hurricane Sandy. When the researcher returned to work on the morning of 10/31/12, it was discovered that the circuit breaker for that outlet had tripped, shutting down the freezer and destroying the research samples within. The reason for the tripped circuit breaker is being investigated. (Event Link)
10/31/12	Non-Reportable	A notification "IH Response needed" was received at 10:02am. IH Responder called x2350 at 10:05am and responded to the scene at Pendant 5 Mezzanine Level in the NSLS-II Building 740 at 10:10am. IH and Fire Rescue responded to the scene. Two fluorescent light bulbs were knocked over (possibly by the wind) and broke on the floor. The area was cordoned off. No visible beads of mercury were observed. The MSDS for the bulbs was acquired and spill clean-up procedures from the MSDS were followed. BNL custodians were called to clean up the area following the MSDS as well as using their procedures using the mercury HEPA vacuum and mercury spill indicator powder. (Event Link)

Where To Find PHENIX Engineering Info

**Run 13
is
coming**

We are well positioned to accomplish all goals for the 2012 shutdown. Barring any additional natural or man made disasters we will be in good shape.

http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm

